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APPLICATION NO.	FILED DATE	FIRST NAME, LAST NAME	ATTORNEY DOCKET NO.	CONTINUATION NO.
09/751,516	12/29/2000	Venkataraman, Manali	42396.P10509	884

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EXAMINER

KIANNI KAVEHC

ARTICLE PAPER NUMBER

DATE MAILED 07/08/2003

Please find below and or attached an Office communication concerning this application or proceeding.

Application No.

Applicant(s)

09/751,516

MURALI, VENKATESAN

**Office Action Summary**

Examiner

Art Unit

Kevin C Kianni

2877

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a) in no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) 9 is/are allowed.
- 6) ☐ Claim(s) 1, 2, 4-8 and 10 is/are rejected.
- 7) ☐ Claim(s) 3 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 07 February 2003 is: a) ☒ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-848)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other \_\_\_\_\_

## DETAILED ACTION

### *Reason for allowance/Allowable Subject Matter*

1. Claim 9 is allowed since the prior art, taken alone or in combination, in combination with other limitations of the base claim does not teach a detector of electromagnetic radiation disposed at the end of said first substrate.

Claim 3 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claim 3 is objected because the prior art taken alone or in combination, in combination with other limitations of the base claim does not teach wherein said transparent material is cladding grown on the inside of the substrate.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-2, 4-8 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cotteverte et al. (US 6542682).

Regarding claims 1-2, 4-8 and 10 Cotteverte teaches an apparatus (shown at least in figure 10; see abstract) comprising: a first substrate 72 having a first opening therethrough (see fig.10; items openings/holes in substrate 72; see col. 3, lines 8-12 and col. 2, lines 3-8); a second substrate 71, attached to said first substrate 72, having

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a second opening therethrough 70 and aligned with the first opening in said first substrate (shown in fig. 10, item 72 and 71); a first materially transparent material/gas disposed in said first substrate hole (see col. 5, lines 10-23 and col. 17, lines 29-43; wherein air/fluid are optically transparent material), and a second optically transparent material/gas disposed in said second substrate hole (see col. 5, lines 10-23 and col. 17, lines 29-43; wherein air/fluid are optically transparent material); wherein the first optically transparent material is optically aligned with the second optically transparent material to form a waveguide (see abstract and col. 4, lines 50-64); wherein said transparent material is composed of an outer cladding 71 and a separate inner transparent material (see col. 5, lines 10-23 and col. 17, lines 29-43; wherein air/fluid are optically transparent material); wherein the first substrate is made of silicon (see col. 8, lines 27-33); wherein said transparent material and said first substrate are made of a same material (col. 8, lines 27-40); a source of electromagnetic radiation attached to said first substrate (see fig. 13, item 96; col. 3, line 65-col. 4, line 7).

However, (A) wherein said transparent material is an optical fiber; (B) a conductive layer on said second substrate. Nevertheless, Cotteverte states that the above optical apparatus includes optical fiber communications switching modules and equipment wherein optical fiber for routing light signal is employed (col. 18, lines 25-33); and wherein the apparatus can include a periodic metallic elements (col. 1, lines 19-22). Thus, it is would have been obvious to a person of ordinary skill in the art when the invention was made to modify Cotteverte's optical apparatus shown in at least fig. 12, by inserting optical fiber into via(s) 18 and have a conductive material layer/device on

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any layer of the optical device since the resultant optical system provides a multilevel waveguide system that is amenable to wide variety of materials and manufacturing processes as desired (see col. 4, lines 43-63).

***Response to Amendment***

4. Applicant's arguments filed on March 31, 2003 have been fully considered and, except for claims and 9, the examiner has used a newly found prior art in order to overcome applicant's amendments/arguments.

**Contact Information**

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kaveh Cyrus Kianni whose telephone number is (703) 308-1216.

The examiner can normally be reached on Monday through Friday from 8:30 a.m. to 6:00 p.m. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank Font, can be reached at (703) 308-4881.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

**or faxed to:**

(703) 308-7722, (for formal communications intended for entry)

**or:**

(703) 308-7721, (for informal or draft communications, please label  
"PROPOSED" or "DRAFT")

Hand delivered responses should be brought to Crystal Plaza 4, 2021 South  
Clark Place, Arlington, VA., Fourth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application should be directed to the Group Receptionist whose telephone number is (703) 308-0956.

Kevin Cyrus Kianni  
Patent Examiner  
Group Art Unit 2877

Frank Font  
Supervisory Patent Examiner  
Group Art Unit 2877

June 12, 2003

